

# **Report of the Project "Wadi Abu Dom Itinerary"**

## **Third Season, 28.2.-21.3.2009**

(funded by the Federal Foreign Office and German Research Foundation, Germany)

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### 1. Staff

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### 2. Proposed work

In 2010, we mentioned in the report some recent destruction in Umm Ruweim. Most irritating was a deep robber's pit in one of the northern rooms. This led to the decision to diminish the survey project and to apply for funding for the architectural documentation of the ruin. The funding was generously offered by the Federal Foreign Office, Berlin. The survey as well as the pottery studies run on, but only small scale.

### 3. Realized work

We have been in the field from Feb. 28th to March 21st. We focused on three subprojects:

- a) architectural documentation of the ruin of Umm Ruweim, accompanied by small-scale sondages (fig. 1). Detailed measuring and architectural description of the whole building, drawing a plan, measuring with Totalstation (Dieter Eigner). Removal of sand as well as 4 sondages should help to clarify the building history (for the location of the areas of sand removal and the sondages, see fig. 2). Therefore we hired three workers of the people living nearby, who were trained and supervised by Mohammed Toun. The archaeological documentation was done by Tim Karberg with the help of Laura Haupt.
- b) Testing of the new survey-software ArcPad 10 in the field and customizing it to the WADI-project, doing survey in the surrounding of Umm Ruweim. After two days survey with standard GPS and Trimble with the mobile geoinformation system ArcPad the results were compared and several applications to the software were installed by Malte Rosenberger. The survey itself was done in our established standard, but documented in Trimble (Angelika Lohwasser, Tim Karberg).
- c) Investigation of the pottery from the survey seasons 2010 and 2011 as well as the pottery of the sondages in Umm Ruweim. The pottery was washed and glued, described in wares and forms, and drawn (Jana Helmbold-Doyé, with the help of Laura Haupt).

#### 4. Results

##### a) Architectural documentation of Umm Ruweim (Fig. 3)

Today, the walls of the ruin have an elevation of about 1 m above recent level and, as shown by the sondage, of about 2 m above natural soil. The complex is built on terraces, the outer courtyard is higher than the outside, the inner courtyard higher than the outer, the central building higher than the inner courtyard. Each level is 50 cm higher than the foregoing.

As already mentioned by Chittick, the ruin of Umm Ruweim consists of two squares with rooms and a central building. Additional to the plan and remarks from 1955, we can state that the building has four entrances in L-form (change of direction), the main entrance is in the East. The other three entrances were blocked in a later stage of usage. In sondage D at the southern entrance we identified traces of wooden beams, therefore one can suggest wooden doors to close the entrance (Fig. 4).

Technique of masonry: The complex is built in dry stone masonry, the joins and hollow spaces are filled with pieces of stone partly mixed with clay, but no mortar. The width of the walls is 60-70 cm, at some walls even 1 m. Up to now there seems to be no rule which walls can be built thick and which thin. All parts of the building are built in the same kind of masonry, and, although there are clearly different building phases visible, it seems that the building was planned and built in one method of construction.

There are staircases in each corner of the outer enclosure (Fig. 5), but also staircases or ramps in three corners of the inner enclosure. In the central building there is one staircase/ramp of the same type. The clearing from sand at staircase 5 brought to light that at this "staircase" there are no stairs of stone, although the sloping sidewall hints to that, but a ramp.

The courtyards are empty, at least as we can suggest from the surface since we did not make a sondage there. Both enclosures have rooms of a width of 2,2m but very different lengths. One room in the outer western border reaches 30m! During time, the rooms were modified, some were divided by intermediate walls, others got the doorways blocked. Within the inner enclosure, all rooms except the ones in the northern part are filled up intentionally at a later phase, perhaps due to restorations. As we got the evidence in the sondage C, a window was blocked and the rooms were filled with soil and gravel. Only the ones at the northern part were left as rooms to enter.

In every part of the building there are small openings, about 20 x 20 cm (fig. 6). They provide ventilation and some light. As these openings are quite irregular in their spacing and in some parts quite rare, we can exclude holes for beams of scaffolding. Moreover, these openings are no omissions of stones in the wall but intentionally built with small architraves.

In some parts of the building there are many doorways, most of them 140 cm wide, some 120 cm, others even 160 cm. But the main entrance is only 1 m wide, which led to the conclusion, that the inner doorways were not closed by wooden doors. Some of the doorways were blocked with dry stone masonry (Fig. 7). The blocking is visible in two types:

1. blocking similar to the masonry of the building's main walls with long slabs of gneiss, probably done already during the first phase of building. We suggest that these openings are only for the transport of material, since in some of these blockings again some small windows were installed.
2. later blocking, probably during the usage of the building, done by small blocks of quartzite.

We were also happy to find the evidence of plaster (Fig. 8). In the sondage C we realized that the inner wall of the inner enclosure was most probably plastered on both sides (although at this stage it

is still to be verified if it is really plaster), but the outer wall of the inner enclosure is without plaster. The intermediate walls seem to connect to the plaster with a join. The plaster at the inner wall is visible on the wall and in the profile, where it seems to be clear that it was done in two different chronological phases, since they started from different floor levels. It seems that we can speak of a building phase with the first layer of plaster and a restauration phase with the second layer of plaster.

We also found some mudbricks (Fig. 9). In one robber's pit in the inner enclosure and in sondage A we identified unburnt bricks of Nile clay. It seems that the dry stone masonry was topped by brickwork. Moreover, the debris of the stones is all in all too little to reach sufficient height of the rooms. We have to deal probably with barrel vaults by mudbrick above the long rooms of the outer border of rooms.

#### Sondages:

A: under the sand levels, there is a layer with mud and a lot of pieces of mudbrick. Thereunder is a layer of organic material, decayed by termites. The combination mudbrick and organic material could origin from a construction above the wall itself. Under these layers there were two strata of usage of the courtyard. In-between, there is a layer with soft material full of bones. In the whole sondage there are several lenses of ash and some pieces of pottery.

B: The impression of sondage A is repeated, but in a less marked manner. The layer with mud is less clear and there were only few finds of bones and pottery. below the window there are visible two phases of mortar. Directly on the stratum connected to the phase of the younger mortar (restauration phase?) a big sherd with the rests of mortar was found. We were lucky to find a piece of charcoal exactly at the first stratum connected to the original construction of the wall.

C: Between the walls of the inner enclosure, the sondage made clear that this space was filled up intentionally at a later phase. The window, visible in sondage B, was blocked. The north wall was completely covered with mortar/plaster, while at the south wall there are only few and inhomogeneous traces of mortar. It is interesting to note that the filling does not cover the complete space between the walls, 20 cm of the walls are visible at both sides. It is interesting that here various pieces of cooking pots were found, this led to the conclusion that the space was partly filled with rubbish.

D: In this small sondage we only tried to reach the natural soil for measurements, this sondage was nearly without finds. At the entrance door, two rests of wooden beams, possibly from a wooden door, but possible also from another construction, came to light.

Many questions could be cleared with the architectural analysis in connection with the sondages, but there are still open questions yet, only some of them mentioned here:

- The staircases lead to platforms, but these are not as high as the roof had been. What is the usage of the staircases and the platforms?
- According to the sondages, the building history consists at least of a construction and a restauration phase. Probably there was a change in function connected with the restauration phase, since three entrances were blocked and the inner border of rooms was filled - maybe to install a higher level?

- The outer entrances are very small, only 1m wide, and closed by wooden doors. It seems to be impossible to give way for animals or vehicles which should be the case for a caravansery.

b) Survey (see Fig. 10, see attached site-list)

This year our survey covered the length of 3,7 km along the Wadi Abu Dom up to N 18°24'21,0" E 31° 59' 33,5". All in all, 3,7 km are covered up to now.

For testing the new survey equipment and software, the near surrounding of Umm Ruweim was surveyed. On the forecourt, directly in front of the ruin, there are several small features, like two box graves, 3 tumuli and one stoneplace. Roughly 300 m to the south, we found the remains of a building with two rooms (?) of stone masonry, covered in the lower part by a big khom of sand. It maybe the rest of a habitation site, covered by sand, but it may also be a tumulus grave with two built grave chambers.

For logistical reasons, the survey itself was based this year in the region of Umm Ruweim, but we were able to fill the gap to the eastern end of the last year survey, anyway. We surveyed a broad khor at the northern bank of the main wadi west to Umm Ruweim to a depth of 4km. On both banks there were only little traces of human activity: one dome grave, one tumulus, some cleft burials and two camp sites. At the mouth of the khor, where it reaches the Wadi Abu Dom, we found 7 post-meroitic tumuli, most of them obviously robbed, but the others presumed to be robbed, too (Fig. 11). The clear impression of last year, concerning the land use by farmers and nomads, were verified in this year: We got acquainted to a pastoralist who came with his sheep more or less every day into this broad and green khor. He lives in the Wadi Abu Dom, but uses the northern khor as pastureland for his sheep. There he has a very ephemer shelter, which would leave no trace in archaeological context. No wonder we did not find anything; if the people in the past did the same, lived in the Wadi and came by and then only to graze their goats and sheep, they would leave no trace.

I think all in all one can compare the kind of living and using the Wadi and its region in the past and today quite well.

In the Wadi itself at least 4 wells were shown to us in direct vicinity of Umm Ruweim. Two of them are in function, two are dry. One of the dry ones is built by stones, the upper part restored with concrete. The lower part, approximately 6 m deep to the sand, on the ground of the well, is well-built with slabs of stones. It is possible that this well is older, but only excavation can proof this (Fig. 12).

Customizing ArcPad 10: The software should support the organisation of the data acquisition to proceed from handwritten, intuitive data acquisition in the field to systematic, GPS-and PDA-based data acquisition (Fig. 13). The database of the campaigns of 2010 and 2011 was used as basis to exemplify suggestions for systematisation. The data acquisition is individualized (for specific features specific data are required). Photographs and sketches are embedded in the database and georeferenced completely. There is an airphoto management program running at the PDA, too. In the future, we can not only search for data in the database in the field, but also start query and compare entries, photographs and sketches right in the field.

### c) Pottery documentation

All in all, 1778 sherds are documented so far, 376 of them also drawn. The finds are completely photographed and included in a database. The pottery covers the periods from neolithic up to the medieval and possibly islamic time. This year again new fabrics were identified, most of them from pottery found within the sondages in Umm Ruweim (Fig. 14, 15). Especially this pottery seems to be of higher quality in comparison to the pottery from the survey. Some of the fabrics seem to be non-local.

### 5. Endangered sites

As we have stated in the report of last year, Umm Ruweim seems to be an endangered site. Luckily no more destruction took place up to this year. We suggested already last year that the installation of a Ghafir would help to secure the site. With the financial help of the Federal foreign office of Germany and with the experience of Mohammed Toum and his enthusiasm to help us in this concern, we found a person living nearby and willing to do this job, named Mablul Jeballah Abdelkarim. The Federal Foreign Office Berlin covers the salary of the ghafir for one year, the WADI-Project for a second year.

### 6. Proposal for future activities

In 2012, we hope to continue the survey in our established form (intensive by foot), supported by PDAs running the ArcPad 10 software. We hope to reach the bent of the Wadi to the south in that season. We plan to do a geophysical survey at some specific sites, too. After establishing the methods, we plan to carry out geophysical reconnaissance in at least one campsite, at the forecourt of Umm Ruweim and near Quweib.

We plan to document the architecture of Quweib in the same way as in Umm Ruweim in future, but we are not sure to get the funding already for 2012.

### 7. Final remarks

We would like to thank Mr. Mohammed Toum very much for all his indispensable help and smooth organisation! He has acted as archaeologist as well as a mediator to the people in the Wadi Abu Dom and especially as a good friend to us!

Karima, 22.3.2011

Angelika Lohwasser

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### **Figures**



Fig. 1: Umm Ruweim from East



Fig. 2: Umm Ruweim I, light = places of removal of sand and debris, black squares: sondages A-D

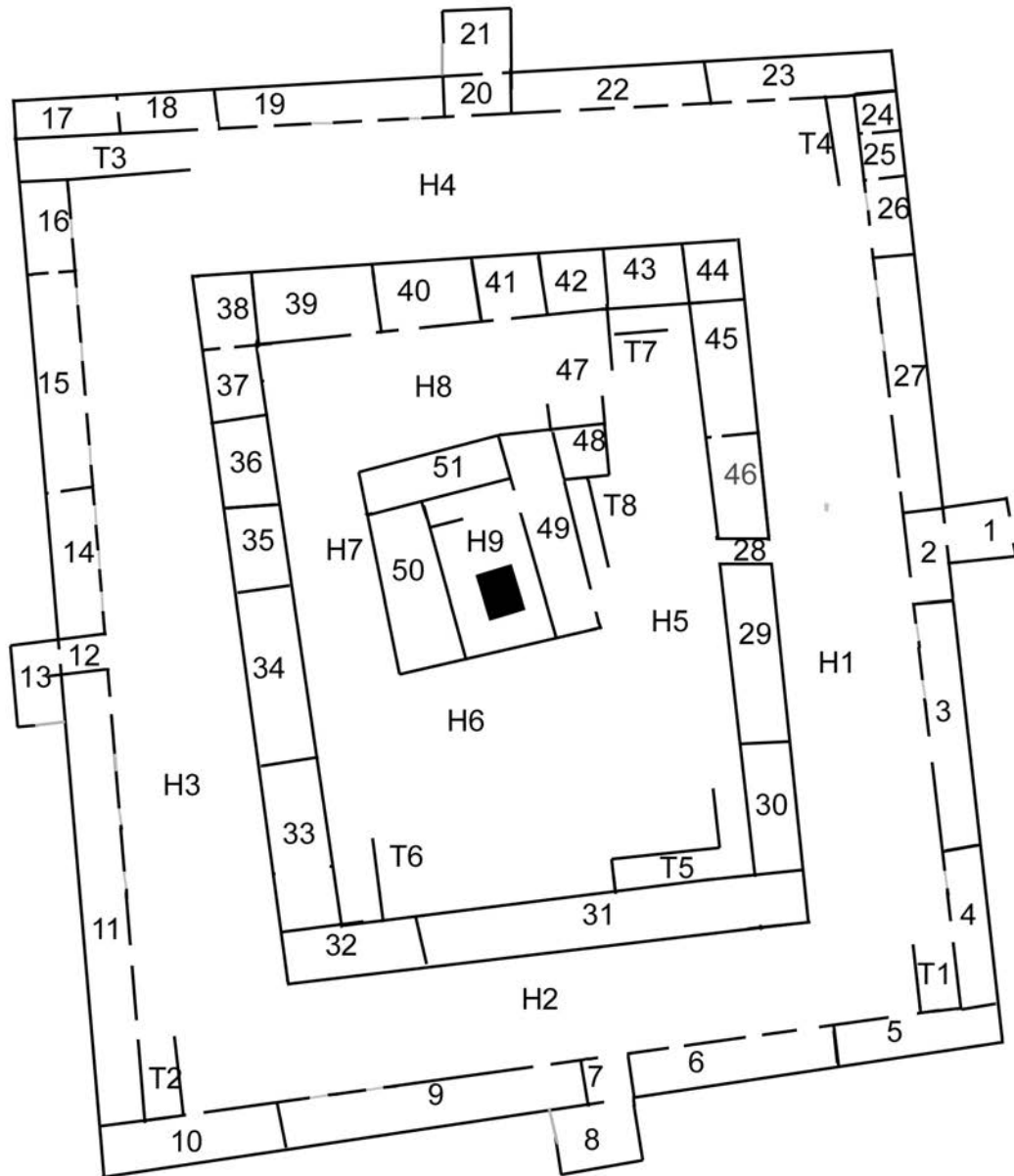


Fig. 3: Sketch plan with labeling of rooms. Light gray sections are doors which were blocked.

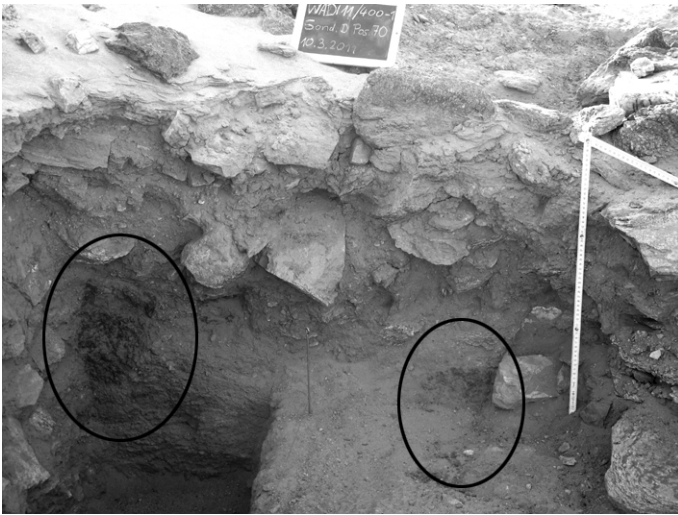


Fig. 4: Sondage D, wooden beams at blocked door

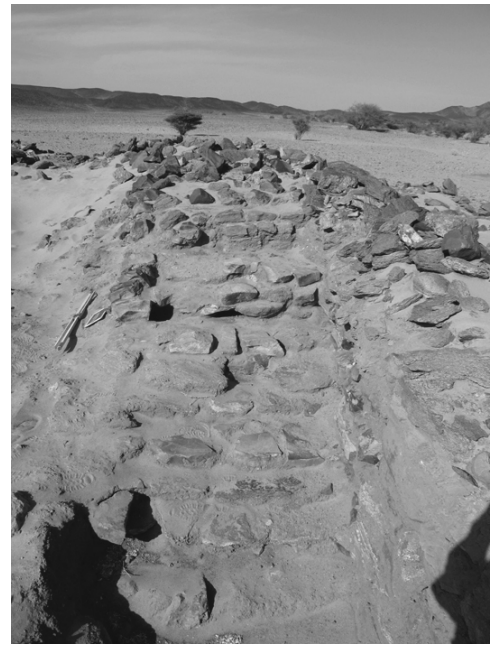


Fig. 5: Staircase 4



Fig. 6: Window



Fig. 7: Blocked door



Fig. 8: Wall with mortar

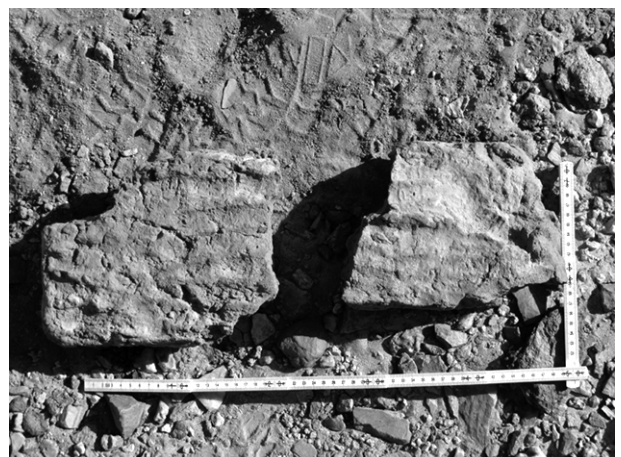


Fig. 9: Mudbricks



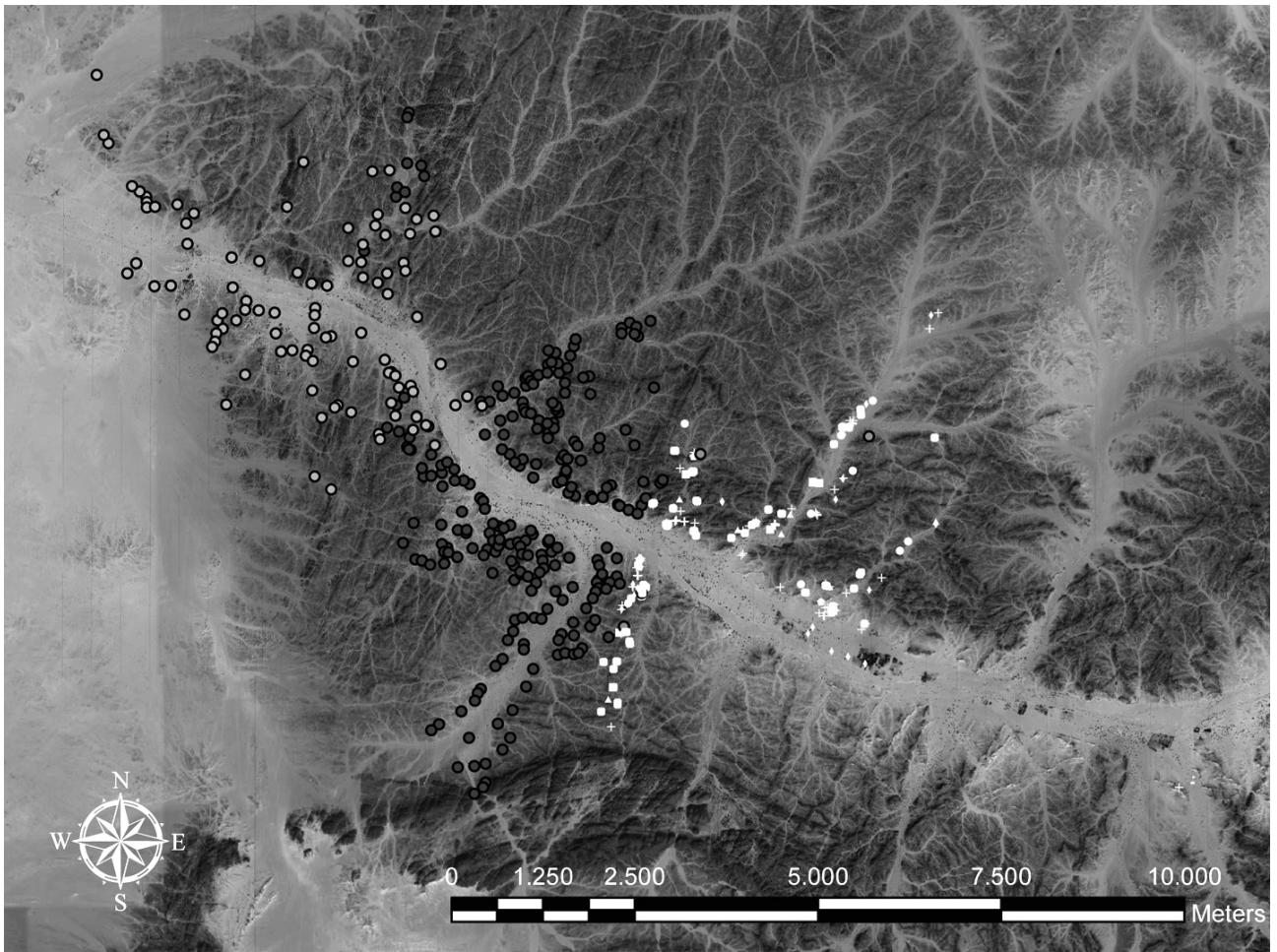


Fig. 10: Map of the surveyed area (2009-2011), white dots are sites identified in 2011

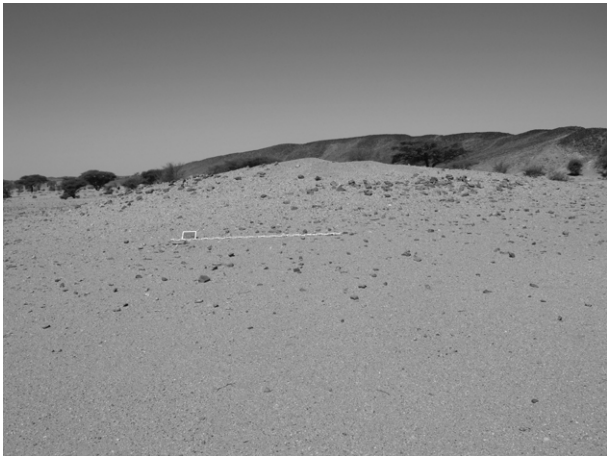


Fig. 11: Site 419 - Postmeroitic tumulus

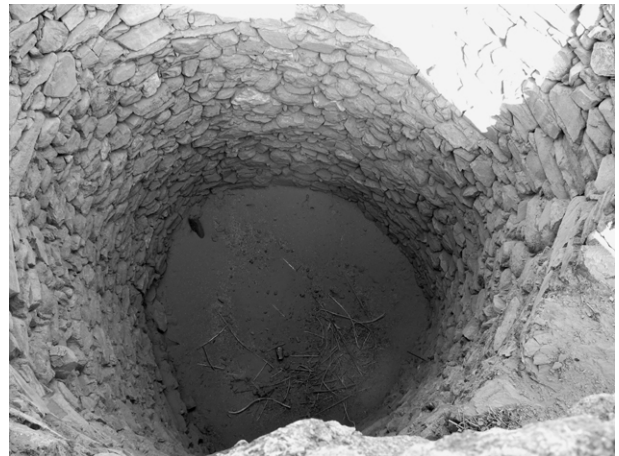


Fig. 12: Site 450 - Well

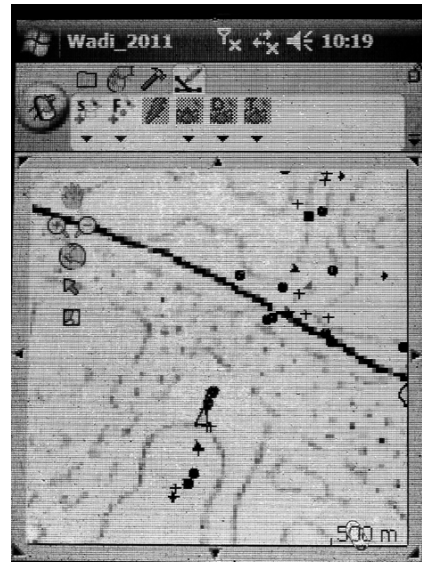
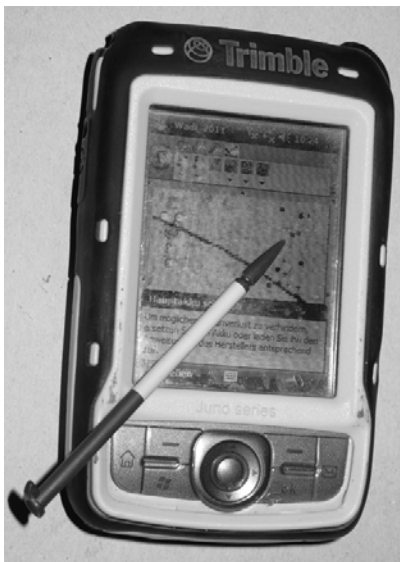


Fig. 13: Trimble with ArcPad 10: Sheet with map, sheet with entry form



Fig. 14: Pottery from Sondage A



Fig. 15: Pottery from sondage C